

REMARKS

1. Claims 1-40 were pending in this application. Claims 1, 2, 8, 9, 15, 16, 17, 18, 29, 30, 31, and 36 have been amended. New claims 41-50 have been added. No claims have been canceled. Therefore, claims 1-50 are now pending in this application.
2. During a telephone conversation on January 8, 2003, the Examiner and Mr. Jeffrey Klayman discussed various proposed claim amendments and the differences between the invention as claimed and the prior art of record. No decision was made regarding allowable subject matter at that time.
3. The Examiner rejected claims 1-40 under 35 U.S.C. 103(a) as being unpatentable over Pare Jr. et al. (U.S. Patent No. 6,154,879) and further in view of Bianco et al. (U.S. Patent No. 6,256,737), hereinafter "Pare" and "Bianco," respectively.
4. Applicant has amended claims 1, 2, 8, 9, 15, 16, 17, 18, 29, 30, 31, and 36, and has added new claims 41-50. The claim amendments, as well as the new claims, are supported in the specification, and add no new matter. A copy of the amended claims showing all deletions and/or additions is attached below. Deleted text is enclosed within brackets, while added text is underlined.
5. Applicants respectfully submit that the pending claims are patentable over Pare and Bianco.

Various embodiments of the present invention provide for a user-maintained personal information registration system. Each user provides personal information and physiological identifiers, and the personal information and representations of the physiological identifiers are stored in a data set in a database. Integrity of the personal information is maintained by permitting modification of a particular user's personal information only by that user. This

restriction is enforced through the use of physiological identifiers (often called "biometrics"). Specifically, a person purporting to be a particular user is only permitted to modify the user's personal information in the stored data set if the subject provides a new set of physiological identifiers and it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the physiological information in the stored data set, so that the subject is authenticated as the user. Independent claims 1, 17, 29, 30, 31, 36, and 39 include this type of element in one form or another.

Neither Pare nor Bianco teach or otherwise suggest, alone or in combination, such a registration system in which integrity of personal information is maintained by permitting modification of a particular user's personal information only by that user, using physiological identifiers to authenticate the user.

Pare uses biometrics to control access to a user's bank account through an ATM, but does not deal with modification of personal information that might be related to the account, such as the user's name, address, and account number, to name but a few.

Bianco uses biometrics to control access to enterprises resources (such as applications and data) generally (see Col. 8, lines 9-24), but does not use biometrics to control the type of access (e.g., read/modify) for a particular resource or to specifically limit modification of a user's personal information to that user, as claimed in the subject application. Rather, Bianco is generally used to prevent a particular user from accessing sensitive information in the enterprise system, for example, by providing access to user medical information only to human resource department personnel (see Col. 20, lines 9-32) or requiring secondary authorization in order to access merger information (see Col. 49, line 54).

The Examiner points out that Bianco teaches a re-enrollment step in which a user's data set is updated with new physiological information (Col. 29, lines 5-

10), and that this re-enrollment step can be usefully incorporated into banking and financial transaction systems such as those of Pare. This re-enrollment step generally causes modification of the physiological information in a user's data set. This re-enrollment step, however, does not involve modification of the user's personal information in the data set. Furthermore, in Bianco, modification of a user's personal information is not restricted to only the specific user, as in the present invention. The subject application discusses a similar re-enrollment step for updating the physiological information in the data set, and also discusses periodic updates of the user's personal information in the data set.

Thus, independent claims 1, 17, 29, 30, 31, 36, and 39 are allowable over Pare and Bianco. Dependent claims 2-16, 18-28, 32-35, 37, 38, and 40 are directed toward such things as additional types of user information (e.g., medical or emergency information), various types of physiological identifiers, various conditions for authenticating a subject, updating personal information, and various types of transactions. Because a dependent claim is deemed to include all of the limitations of its base claim and any intervening claim, Applicants respectfully submit that dependent claims 2-16, 18-28, 32-35, 37, 38, and 40 are also patentable over Pare and Bianco.

6. Applicants respectfully submit that new dependent claims 41-50 are patentable over Pare and Bianco.

New claims 41 and 42 are directed toward reducing the risk of identity theft by retaining a representation of a physiological identifier provided by a subject if there is an insufficient match and providing access to the retained representation of the physiological identifier by a law enforcement official (see Page 9, line 31 through Page 10, line 7 and Page 17, lines 2-18).

New claims 43-46 are directed toward permitting a third party to view a user's personal information without having to provide physiological identifiers and without having to be authenticated as the user (see Page 17, line 19 through Page 18, line 7).

New claims 47-50 are directed toward providing each user with a token that includes an identifier that, when presented to the database by a third party, enables the third party to access but not modify a user's information (see Page 17, line 25 through Page 18, line 1).

Because a dependent claim is deemed to include all of the limitations of its base claim and any intervening claim, Applicants respectfully submit that dependent new claims 41-50 are patentable over Pare and Bianco.

7. Claims 1-50 are pending in this application. All pending claims are believed to be in a form suitable for allowance. Therefore, the application is believed to be in a condition for allowance. The Applicant respectfully requests early allowance of the application. The Applicant requests that the Examiner contact the undersigned, Jeffrey T. Klayman, if it will assist further examination of this application.

Respectfully submitted,



Jeffrey T. Klayman
Registration No. 39,250
Attorney for Applicants

BROMBERG & SUNSTEIN LLP
125 Summer Street
Boston MA 02110-1618
Tel: 617 443 9292 Fax: 617 443 0004

234802

AMENDED CLAIMS WITH CHANGES

1. (Twice amended) A method of administering registration of personal information in a data base in a manner tending to assure integrity of [data] the personal information therein, the method comprising:
 - a. obtaining, from each user with respect to whom data is to be placed in the data base, personal information of such user, the content of such personal information initially established by such user in an enrollment phase.
 - b. also obtaining [in the enrollment phase] , from each such user, a first set of physiological identifiers associated with such user, the first set of physiological identifiers initially provided by such user in the enrollment phase;
 - c. storing, in a digital storage medium, a data set pertinent to such user, the data set including such user's personal information and a representation of the physiological identifiers associated with such user; and
 - d. permitting a subject to modify a user's personal information in the stored data set pertinent to such user only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as such user.

2. (Twice amended) A method according to claim 1, further comprising obtaining from such user such user's medical information, [and] wherein the data set includes such user's medical information, and permitting a subject to modify a user's medical information in the stored data set pertinent to such user only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as such user.

8. (Twice amended) A method according to claim 1, wherein the first set includes at least one member selected from the group consisting of a fingerprint of such user and [an] the configuration of an iris in an eye of such user and at least one member selected from the group consisting of characteristics of utterances of such user and the appearance of such user's face.

9. (Amended) A method according to [claim 1] any of claims 1 and 2, wherein, pursuant to step (d), [a] the subject is permitted to modify the user's information in the stored data set only if the subject provides the new set of physiological identifiers under a condition permitting verification, independent of the physiological identifiers, that the new set is being provided by the person purporting to provide them.

15. (Twice amended) A method according to claim 1, further comprising:
prompting each user, on a periodic basis, to update the user's personal
information in the data set pertinent to such user.

16. (Twice amended) A method [for authenticating a user transaction]
according to claim 1, [the method] further comprising:
obtaining a test set of physiological identifiers from a subject purporting
to be a specific user;
accessing information in the data set pertinent to the specific user [stored
in accordance with the method of claim 1]; and
determining if there is a sufficient match between at least one member in
the test set and a corresponding physiological identifier represented in the data
set.

17. (Twice amended) A method for authenticating a user transaction, the
method comprising:
obtaining a test set of physiological identifiers from a subject purporting
to be a specific user;
accessing information in a first data set pertinent to the specific user
stored in a registration data base, the data base containing information provided
by multiple users in a separate data set for each user, each data set of a specific
user including (i) personal information, of the specific user, that has been

established by the specific user, and (ii) a representation of a first set of physiological identifiers, associated with the specific user, that has been provided by the specific user, the data base being maintained under conditions wherein modification by a subject of a user's personal information in a stored data set pertinent to the specific user is permitted only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as the specific user; and

determining if there is a sufficient match between at least one member in the test set and a corresponding physiological identifier represented in the data set.

18. (Amended) A method according to claim 17, wherein:

the database is accessible via a server at a first location;

obtaining the test set of physiological identifiers is performed at a second location remote from the first location;

determining if there is a sufficient match includes communicating with the server from the second location over a network.

29. (Twice amended) A digital storage medium on which has been recorded a multi-user personal information data base, the data base comprising, for each specific user, a data set pertinent to the specific user, the data set including:

- (a) the specific user's personal information obtained from the specific user;
- (b) a representation of a first set of physiological identifiers associated with the specific user; and
- (c) the specific user's emergency information obtained from the specific user;

the storage medium being maintained under conditions wherein modification by a subject of such personal and emergency information in a stored data set pertinent to the specific user is permitted only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as the specific user.

30. (Amended) A system for updating a personal information database containing a data set for each one of multiple users, each data set including a user's personal information and a representation of a first set of physiological identifiers associated with the user, the system comprising:

- a. a physiological identifier transducer having an output representing a physiological identifier associated with a subject;
- b. a user access authorization module, coupled to the physiological identifier transducer[,] and to the database, for determining whether the output of the physiological identifier transducer sufficiently matches the representation of the first set of physiological identifiers, so that the subject is authenticated as the user;
- c. a user data set access module, coupled to the user access authorization module and to the database, for accessing the user data set, in the event that the user access authorization module has authenticated the subject as the user; and
- d. a user data set update module, coupled to the database, to the user data set access module, and to a user input, permitting the user to update such user's personal information in the corresponding data set in the database in the event that the user data set access module has provided access to the user data set.

31. (Twice amended) A system for authenticating transactions, the system comprising:

- a. a multi-user personal information data base, the data base comprising, for each specific user, a data set pertinent to the specific user, the data set including:

- (i) personal information, of the specific user, that has been established by the specific user;
- (ii) a representation of a first set of physiological identifiers, associated with the specific user, that has been provided by the specific user;

the data base being maintained under conditions wherein modification by a subject of a user's personal information in a stored data set pertinent to the specific user is permitted only if (i) the subject provides a new set of physiological identifiers and (ii) it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as the specific user;

- b. a multiplicity of remotely distributed terminals in communication with the data base, each terminal including a physiological identifier transducer and a communication link with a merchant; and
- c. an authenticity checker, which determines whether there is a sufficient match between the output of a physiological identifier transducer attributable to a subject purporting to be a user and a physiological identifier in the first set.

36. (Amended) A method of administering [registration of] personal information in a data base in a manner tending to assure integrity of data therein, the data base being of a type wherein a stored data set is established for each user and there has been obtained from each user with respect to such data a first set of

physiological identifiers associated with such user and included in the data set, the method comprising:

- a. obtaining from a subject seeking to modify information in the stored data set pertinent to such user a new set of physiological identifiers, and
- b. permitting the subject to modify such user's personal information in the stored data set only if it is determined, by recourse to the stored data set, that there is a sufficient match between at least one member in the new set and a corresponding member of the first set, so that the subject is authenticated as such user.

STATUS

2. Applicant is a small entity. A statement was already filed.

EXTENSION OF TERM

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply. Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

FEE FOR CLAIMS

4. The fee for claims (37 C.F.R. 1.16(b)-(d)) has been calculated as shown below:

	(Col.1)		(Col. 2)		(Col. 3)	SMALL ENTITY
	Claims Remaining After Amendment		Highest No Previously Paid For		Present Extra	Addit Fee
Total	75	Minus	52	= 23	x \$9 =	\$207
Indep	7	Minus	7	= 0	x \$42 =	\$0
First Presentation of Multiple Dependent Claim				+ \$140 =		\$0
				Total Addit. Fee		\$207

- * If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.
- ** If the "Highest No. Previously Paid For" IN THIS SPACE (Column 2, Row 1) is less than 20, enter "20".
- *** If the "Highest No. Previously Paid For" IN THIS SPACE (Column 2, Row 2) is less than 3, enter "3".
- The "Highest No. Previously Paid For" (Total or Indep.) is the highest number found in the appropriate box in Col. 1 of a prior amendment or the number of claims originally filed.

Total additional fee for claims required \$207.00

FEE PAYMENT

5. Attached is a check in the amount of \$207.00.

Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

FEE DEFICIENCY

6.

If any additional extension and/or fee is required, charge Account No. 19-4972.

If any additional fee for claims is required, charge Account No. 19-4972.

Date: January 28, 2003



Jeffrey T. Klayman
Registration No. 39,250
Bromberg & Sunstein LLP
125 Summer Street
Boston, MA 02110-1618
US
617-443-9292
Customer No. 02101